



# SMA Female Bulkhead to RA SMP Female Cable FM-SR086TB Coax

The SMA female bulkhead to RA SMP female cable using FM-SR086TB coax, part number FMCA2103, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMP cable assembly has a female to female gender configuration with 50 ohm formable FM-SR086TB coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA2103 SMA female to SMP female cable assembly operates to 18 GHz. The right angle SMP interface on the FM-SR086TB cable allows for easier connections in tight spaces. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

## **Electrical Specifications**

| Description             | Min | Ty    | ур Мах | Units        |
|-------------------------|-----|-------|--------|--------------|
| Frequency Range         | DC  |       | 18     | GHz          |
| VSWR                    |     |       | 1.4:1  |              |
| Velocity of Propagation |     | 69    | .5     | %            |
| Capacitance             |     | 29 [9 | 5.14]  | pF/ft [pF/m] |

## **Performance by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 1    | 2    | 4.5  | 9    | 18   | GHz   |
| Insertion Loss (Typ.) | 0.13 | 0.2  | 0.41 | 0.66 | 1.02 | dB    |
|                       | 0.43 | 0.66 | 1.35 | 2.17 | 3.35 |       |

#### **Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 0 in [0 mm]
Diameter 0.433 in [11 mm]

#### **Cable**

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type

FM-SR086TB 50 Ohms Solid

Copper Clad Steel, Silver

PTFE



## **Configuration:**

- SMA Female Bulkhead
- SMP Female Right Angle
- FM-SR086TB

## **Features:**

- Max Frequency 18 GHz
- 69.5% Phase Velocity
- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- Cable may be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- High RF Shielding > 100 dB
- 100% Hi-pot and continuity tested
- 100% VSWR tested to max frequency of assembly
- Standard and custom lengths ship the same day

# **Applications:**

- General Purpose
- · Laboratory Use

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056

Tel: 1-800-715-4396 / (972) 649-6678

Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Outer Conductor Material and Plating Outer Conductor Diameter

Tinned Copper Composite Braid 0.086 in [2.18 mm]

#### **Connectors**

| Description                 | Connector 1            | Connector 2            |  |  |
|-----------------------------|------------------------|------------------------|--|--|
| Туре                        | SMA Female             | SMP Female             |  |  |
| Mount Method                | Bulkhead               |                        |  |  |
| Specification               | MIL-STD-348A           | MIL-STD-348A           |  |  |
| Impedance                   | 50 Ohms                | 50 Ohms                |  |  |
| Contact Material & Plating  | Beryllium Copper, Gold | Beryllium Copper, Gold |  |  |
| Contact Plating Spec.       | 50µ in. minimum        |                        |  |  |
| Dielectric Type             | Teflon                 | PTFE                   |  |  |
| Outer Cond Material & Plati | ng                     | Beryllium Copper, Gold |  |  |
| Body Material & Plating     | Stainless Steel, Gold  | Beryllium Copper, Gold |  |  |
| Body Plating Spec.          | 30µ in. minimum        | 30μ in. minimum        |  |  |
|                             |                        |                        |  |  |

## Mechanical Specification Notes:

## **Compliance Certifications** (see product page for current document)

#### Plotted and Other Data

Notes:

• Values at 25°C, sea level.

#### **How to Order**

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or  $\pm$  3/8", whichever is greater.





SMA Female Bulkhead to RA SMP Female Cable FM-SR086TB Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: SMA Female Bulkhead to RA SMP Female Cable FM-SR086TB Coax FMCA2103

The information contained in this document is accurate to the best of our knowledge and representative of the part

URL: https://www.fairviewmicrowave.com/sma-female-ra-smp-female-cable-fm-sr086tb-coax-fmca2103-p.aspx

| described   | herein. It may be necessar     | ry to make modifications to the pa | art and/or the documentation of the | part, in order  |
|-------------|--------------------------------|------------------------------------|-------------------------------------|-----------------|
| to implem   | ent improvements. Fairview     | Microwave reserves the right to    | make such changes as required. Unl  | ess otherwise   |
| stated, all | specifications are nominal.    | Fairview Microwave does not m      | ake any representation or warranty  | regarding the   |
| suitability | of the part described herein   | n for any particular purpose, and  | Fairview Microwave does not assum   | e any liability |
| arising ou  | t of the use of any part or do | ocumentation.                      |                                     |                 |
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